



*Hands On, Measurable
Training Programs*

CST Studio Suite – Microwave and Antenna

Course Code	SIM-en-CSTMWA-A-v30R2021
Brand & Release	SIMULIA 2021
Duration	1 day
Level	Advanced
Prerequisites	Introduction to CST Studio Suite

Objectives:

Throughout this course you will become familiar with high frequency solvers used to simulate different types of antennas. This course will also discuss more specific topics like antenna matching network and SAR calculations in the human body.

Class Structure:

Upon completion of this course, you will be able to:

- Construct and simulate antennas using different solvers
- Visualize and extract primary results (S-Parameters, Nearfield distribution, Farfield) and more advanced results using post processing (i.e. Potential Bandwidth, SAR)
- Handle imported CAD models
- Design simple matching network
- Use the Hybrid Solver to simulate more complex RF Systems

Class Lessons:

Lesson 1: Waveguide Ports

Lesson 2: Meshing Overview

Lesson 3: Antenna Simulation Overview

Workshop 1: Horn Antenna (a) and Reflector Antenna (b) Simulation

Workshop 2: Dual Patch Antenna and Feeding Network

Workshop 3: Patch Antenna Array Design

Workshop 4: Mobile Phone Antenna Design and Integration

Workshop 5: Radio Frequency Identification (RFID) Tag